

Sequencing with the RD-600 Digital Piano

The RD-600 features 128 high quality sounds including Patches from our popular voice expansion board, the VE-RD1. In addition to the many live performance parameters included in the RD-600, it can also function as a 16-Part multi-timbral synthesizer for sequencing applications. This allows you to create elaborate arrangements using the rich sounds and effects built into the RD-600 with an external sequencer. This document will focus on sequencing with the RD-600 and also using and editing the effects parameters. First, we will go over the connections and setup necessary to operate the RD-600 with your sequencer. Next, we will select instruments for your sequence and begin the recording process. Finally, we will discuss how to apply effects to the instruments and save these settings. This document is intended to be a supplement to the Owner's Manual. The manual contains detailed explanations and instructions for all functions of the RD-600. It is highly recommended that you read the manual in its entirety in order to use the RD-600 to its fullest potential.

I. Connections

Before we start to sequence, there are a couple of setup procedures to complete so the RD-600 can properly communicate with your sequencer. First, connect a MIDI cable from the MIDI OUT of the RD-600 to the MIDI IN of the sequencer or MIDI interface. Then, connect another MIDI cable from the MIDI OUT of the sequencer or MIDI interface to the MIDI IN of the RD-600.

II. Setting up for Sequencing

Before you start sequencing, it is a good idea to initialize the current setup so all of the parameters are at a default setting. It is also necessary to turn the local off to disable the internal sound source of the RD-600. This will alleviate any problems of duplicate notes when recording your sequenced parts. Use the following procedure to initialize the current setup and turn local control off:

- 1) Press EDIT.
- 2) Press both GROUP buttons simultaneously. Press PAGE E three times followed by YES twice to initialize the current setup.
- 3) Press the INT LOWER and UPPER buttons above the sliders in the PART SWITCH/LEVEL section so they are not lit.

NOTE: Now that we have turned off the local control for the RD-600, you will need to enable MIDI Thru (sometimes referred to as Soft Thru or MIDI Echo) on your sequencer. Without this setting, you will not be able to hear any sound when you play the RD-600.

III. Selecting Instruments for the Parts

The RD-600 is 16 part multitimbral meaning it can play 16 different instruments (Parts) at one time. A sequencer can be used to record these Parts. Any of the RD-600's 128 instruments can be assigned to each of the 16 Parts. Use the following procedure to select instruments for the Parts:

- 1) While holding EDIT, press SPLIT.
- 2) Press the PAGE F button.
- 3) Use the INC/DEC buttons to select Part 1.
- 4) Press GROUP A or B followed by the TONE CATEGORY and VARIATION buttons to select the desired instrument. The instrument that you select will be briefly displayed on the LCD.
- 5) Repeat steps 3 and 5 to select additional instruments for Parts 2 through 16.

NOTE: Most sequencers will allow you to choose instruments directly from the sequencer with a message referred to as program change. Please refer to the back cover of your RD-600 Owner's Manual for the Patch names and corresponding program change numbers. In addition, some programs even contain the Patch names of various Roland products. Contact the manufacturer of your software program for more information.

IV. Setting up for Sequencing

By default, the RD-600 is setup for MIDI channels 1-16 for Parts 1-16. If desired, you can change these channels or turn them off. Use the following procedure:

- 1) While holding EDIT, push the Modulation Lever forward.
- 2) Press the PAGE E button twice.
- 3) Use the INC/DEC buttons to select the Part number.
- 4) Use the PAGE E button to move the cursor to channel.
- 5) Use the INC/DEC buttons to select the MIDI channel.
- 6) If desired, press both INC/YES and DEC/NO simultaneously to disable or turn off a selected part.

V. Recording Your Performance

Now that we have setup the desired instruments and MIDI channels, were ready to record. Use the following procedure:

- 1) While holding EDIT, press SPLIT.
- 2) Press the PAGE F button.
- 3) Press the TX UPPER button under PART SELECT.
- 4) Use the INC/DEC buttons to select the desired MIDI channel to match the Part you would like to record.
- 5) Start your sequencer recording and play your performance for that Part.
- 6) Repeat steps 4 and 5 to record additional Parts.

NOTE: There are many sequencers that have the ability to select the desired MIDI channel on each track for recording. This function is sometimes referred to as Keyboard Thru or Auto Channelize. If your sequencer has this function, it will not be necessary to perform step 4. Instead, select the MIDI channel for each track on your sequencer.

VI. Using the EFX Processor

The RD-600 contains four effects processors including EFX, Reverb, Chorus and a three band EQ. There are 40 stereo EFX algorithms including rotary speaker, distortion and triple-tap-delay that can be applied to Parts in your sequence. The RATE/SENS and the DEPTH/LEVEL knobs have different assigned parameters depending on the chosen effect. When a Patch is selected, the RD-600 will automatically select an EFX for that instrument (i.e. the Organ Patches have a Rotary Speaker effect applied to them). The EFX algorithm can also be changed manually. For example, let's apply the Auto-Wah effect to the E. Organ Patch and then change the Rate and Depth of the effect. Use the following procedure to change the effect:

- 1) Using section III above, select the E. Organ Patch. Notice that the Rotary Speaker effect is automatically selected.
- 2) While holding EDIT, press EFX UPPER.
- 3) Press the DEC/NO button once to select the Auto-Wah effect.

Use the following procedure to modify the effect:

- 1) Rotate the RATE/SENS knob to change the rate of the Auto-Wah.
- 2) Rotate the DEPTH/LEVEL knob to change the depth.

Now that you have defined the overall EFX settings for this setup, use the following procedure to assign this processor to the UPPER or LOWER Part:

- 1) While holding EDIT, press EFX UPPER again. Notice that the screen now shows the EFX level for the UPPER Part.
- 2) Use the INC/DEC buttons to decrease or increase the amount of the effect applied to the UPPER Part.

If you want to apply this effect to both UPPER and LOWER Parts, hold down the EFX UPPER button while simultaneously pressing the EFX LOWER button.

VII. Applying Reverb and Chorus

Adding reverb to a part will create an ambiance to a sound. It can give you the feeling of playing in a concert hall. Chorus can broaden the sound, adding depth and luster to a Part. The following chart lists the parameters available for editing:

REVERB		CHORUS	
Type	Room1, Room2, Stage1, Stage2, Hall1, Hall2 Delay and Pan-Delay	Level	The level of the chorus effect.
Level	The level of the reverb effect.	Rate	The speed of the chorus effect.
Time	Sets the length of time the reverb will continue.	Depth	Sets the depth that the chorus will modulate.
HF Damp	Sets the frequency that the high range will be cut.	PreDelay	Adjusts the amount of time before the chorus effect begins to sound.
Delay Feedback	Adjusts the amount of times the delay will repeat.	Feedback	Adjusts the amount of chorus sound that is returned or fed back into the chorus.
		Output	Determines how the chorus and reverb will be connected before being sent to the output.

Use the following procedure to change the Reverb settings:

- 1) While holding EDIT, press the REVERB button repeatedly to step through the different parameter settings listed above.
- 2) Use the INC/DEC buttons to change the values for these settings.

Use the following procedure to change the Chorus settings:

- 1) While holding EDIT, press the CHORUS button repeatedly to step through the different parameter settings listed above.
- 2) Use the INC/DEC buttons to change the values for these settings.

Now that you have defined the overall Reverb and Chorus settings for this setup, use the following procedure to define the Reverb and Chorus amount for each Part in your sequence:

- 1) While holding EDIT, press SPLIT.
- 2) Press the PAGEF button.
- 3) Use the INC/DEC buttons to select the desired Part.
- 4) While holding EDIT, press REVERB or CHORUS to display the Reverb or Chorus Amount parameter.
- 5) Use the INC/DEC buttons to set the effect amount for the currently selected Part.

VIII. Saving the Setup

All of the changes thus far are only in temporary memory. This means that the changes will revert back to their original settings if the RD-600 is turned off or if a new Setup is selected. We must write the settings to a Setup in order to retain them for future use. Use the following procedure to save your settings to an Internal Setup:

- 1) Press EDIT so it is lit.
- 2) Press both GROUP buttons simultaneously.
- 3) Use the INTERNAL TONE CATEGORY and INTERNAL TONE VARIATION buttons to select the desired Setup destination.
- 4) Press INC/YES.

Use the following procedure to recall the saved Setup:

- 1) Press both GROUP buttons simultaneously.
- 2) Use the INTERNAL TONE CATEGORY and INTERNAL TONE VARIATION buttons to select a Setup.

IX. Customizing The Keyboard

Here are some extra features available to help you in the operation of the RD-600:

Use the following procedure to set the RD-600 to power up with your current Setup:

- 1) While holding EDIT, press SPLIT.
- 2) Press the PAGE F button three times to select Powerup Mode.
- 3) Press INC/YES to change DEFAULT to LAST.

There is a Control Channel setting in the RD-600 that will allow you to change Setups with a MIDI program change message. Use the following procedure to set the Control Channel:

- 1) From the Powerup Mode page, press the PAGE F button three times to select Control Ch.
- 2) Use the INC and DEC buttons to select a MIDI channel that will not be used in your sequence (i.e. Channel 16). If you set the Control Channel to a channel that you are using, you may inadvertently change your Setup instead of the desired Patch.

NOTE: Sending a program change from 1-64 to MIDI Channel 16 will now change entire Setups.

- 3) To disable the Control Channel function press INC and DEC simultaneously.